FEDERATION AERONAUTIQUE INTERNATIONALE

FAI AEROMODELLING COMMISSION (CIAM)

PLENARY MEETING
to be held at the Olympic Museum - Lausanne
on the 14th and 15th MARCH 2003 at 9.00 hours

1) ***PLENARY MEETING SCHEDULE AND TECHNICAL MEETINGS***
As decided at the 2002 December Bureau Meeting, only the following Technical Meetings will take place at the 2003 CIAM Plenary Meeting: Free Flight, F3B/J and F3C.

2) ***MINUTES OF THE MARCH 2002 BUREAU AND PLENARY MEETINGS, AND OF THE DECEMBER 2002 BUREAU MEETING: FOR APPROVAL***

3) ***CIAM ASSISTANT TO THE SECRETARY***

4) ***REPORTS***

A. 2002 FAI General Conference, by the FAI Secretary General, Max Bishop.

B. 2002 CASI Meeting, by CIAM President, Sandy Pimenoff.

C. 2002 World Championships, by Jury Chairmen (ANNEX 1).

- F1A, F1B, F1J Juniors (Slovakia, by Vladimir Hadac);
- F1D Seniors and Juniors (Romania, by Pierre Chaussebourg);
- F2A, F2B, F2C, F2D Seniors and Juniors (Germany, by Andras Ree);
- F3J Seniors and Juniors (Finland, by Sandy Pimenoff);
- F4B and F4C (Canada, by Narve Jensen);
- F5B and F5D (Switzerland, by Sandy Pimenoff);
- Space Models Seniors and Juniors (Czech Republic, by Srdjan Pelagic).

D. Extraordinary problems at 2002 World and Continental Championships, by CIAM President, Sandy Pimenoff

E. Subcommittees and CIAM Technical Secretary reports (ANNEX 2).

- Free Flight, by Ian Kaynes;
- Control Line, by Laird Jackson;
- R/C Aerobatics, by Bob Skinner;
- R/C Gliders, by Tomas Bartovsky;
- R/C Helicopters, by Horace Hagen;
- R/C Pylon, by Bob Brown;
- Scale, by Narve Jensen;
- R/C Electrics, by Emil Giezendanner;
- Space, by Srdjan Pelagic;
- Education and Information, by Dave Brown.

F. 2002 World Cups, by World Cup Coordinators (ANNEX 3).

- Free Flight, by Ian Kaynes;
- Control Line, by Bruno Delor;
- Thermal Soaring and Duration Gliders, by Thomas Bartovsky;
- Electric Powered Model Aircraft, by Emil Giezendanner;
- Space Models, by Marian Jorik.

G. Invitation to the 2002 World Cup awards.

OFFICIAL INVITATION TO THE
2002 WORLD CUPS AWARDS CEREMONY

The 2002 World Cup awards for classes F1A, F1B, F1C, F1E, F2A, F2B, F2C, F2D, F3J, S4B, S6B, S7, S8E/P and S9B will be presented on Friday March 14, at 18.00 hours in front of the Olympic Museum in Lausanne, or, in case of inclement weather, postponed to Saturday, March 15, always at 18.00 hours. Invitation is for winners (first, second, third) or their representatives, all CIAM delegates, observers, FAI and Bureau officials.

H. Trophies, by CIAM Secretary, Luca Gialanella (ANNEX 4).

I. Sporting Code Section 4 – Revision and Update, report by Technical Secretary, Bob Underwood.

5) *GENERAL ITEMS*

A. Voting Procedure For Plenary Meetings.

B. Judges and Subcommittees Lists, for Approval.

C. FAI-CIAM Medals and Diplomas, consideration of nominations (ANNEX 5):

(a) FAI Aeromodelling Gold Medal

- Frank ZAIC (USA)

(b) Alphonse Penaud Diploma

- Manabu HASHIMOTO (Japan)
- Michael KROEGER (Germany)

(c) Antonov Aeromodelling Diploma
- Helmut QUABECK (Germany)
- Tomas BARTOVSKY (Czech Republic)
- Frank ZAIC (USA)

(d) Frank Ehling Diploma
- Jordan KOVACEVIC (Yugoslavia)
- Gyorgy PINKERT (Hungary)

D. Aeromodelling Fund - Budget 2004

E. Subcommittee Chairmen, Term of Office.

F. CIAM Flyer, by the Editor, Emil Giezendanner.

G. World Air Games 2005, by CIAM President, Sandy Pimenoff.

H. Artistic Aerobatics Rules, by CIAM Media Consultant, Guy Revel.

I. Competition Flyers Versus Sport/Fun Flyers. What Can Ciam Promote/Offer?

6) AEROSTATS

7) ELECTIONS. **Nominations for Bureau Officers and Subcomm. Chairmen (17.30 hours)**

8) SPORTING CODE PROPOSALS

The Agenda contains all proposals regularly received by the FAI Office according to rules A.6 and A.7. Those proposals not eligible to be voted at the 2003 Plenary Meeting (rule A.12 applies) are presented for information and discussion in the <Deferred Section> at the end of the Agenda.
The new text is shown in **bold type.**

BUREAU PROPOSALS

a) **Combination of F1J and F1P at the 2003 Juniors Continental Championships**

Classes
The CIAM Bureau Meeting November 2002 decided that both F1J and F1P models may be flown in the power class at this event. At model registration each power model will be recorded as either F1J or F1P and must conform to the model specifications of the relevant class. A competitor is allowed to enter a maximum of four power models. The power class will be flown in 7 rounds to a maximum time of 3 minutes. Motor run will be 7 seconds for F1J and 10 seconds for F1P.

National Teams
A maximum of 3 competitors in each class. The CIAM Bureau has decided that 4 competitors may be entered in the power class provided that at least one of the competitors is flying only F1P models.

Classification

Individual and team classification in each class. The team award in the power class will be based on the three best scoring team members.

Reason: The 2002 Plenary Meeting proposed class F1P for replacement of F1J in the World and Continental Championships for Juniors, but there has been, so far, little evidence of these models. The Bureau unanimously accepted the Free Flight Subcommittee opinion to join the two classes at the 2003 Juniors European Championships: the main aim is to ensure a valid competition and promote FAI Junior FF power flying.

b) **A.10 JUDGES LISTS** (Volume ABR, Section 4A, Part One, CIAM Internal Regulations).

<Nominations for persons to be put on the List of International Judges must be received by the FAI Office no later than **November 15** to be available at the following Plenary Meeting. The list is valid for the year starting the next January. **If no list is presented by the deadline, the old one stands. Names indicated in the Judges Lists are to be considered advisory.** The nomination must contain……>.

Reason: To unify the deadline with that of other CIAM requirements, and to define the status of Judges.

c) **A.11. LIST OF TECHNICAL EXPERTS** (Volume ABR, Section 4A, Part One, CIAM Internal Regulations).

<Nominations for persons to be put on the list of technical experts from which the elected subcommittee chairmen can choose their members must be received by the FAI Office no later than **November 15…….>.**

Reason: To unify the deadline with that of other CIAM requirements.

d) **B.4.1. FAI JURY** (Volume ABR, Section 4B, General Rules for International Contests). Add to the end of the fourth paragraph.

<In the situation where a new world record is set during a World or Continental Championship, it is the responsibility of the FAI Jury for that event to obtain the appropriate documents from the organisers, needed to homologate the record, and forward them to the FAI Headquarters for informational purposes>.

Reason: To clarify the procedure in case of a new world record during Championships is set and to have an official source informing that a world record has been broken.

VOLUME ABR – GENERAL RULES FOR CIAM ACTIVITIES

Section 4A
Part One - CIAM Internal Regulations

a) A.2. Procedure for CIAM Plenary Meetings – Canada. Add a new paragraph A.2.4.:

<**Decisions taken at the Plenary Meeting will be taken on a simple majority vote>.**

Reasons: To conform to present practice. Section 5.5.6 of the Bylaws to the statutes clearly gives a commission the right to decide for itself how its decisions are to be taken. The practice of "not voting" is redundant.

b) Safety Rules and Organiser Guides – United Kingdom

This applies to section 4A, 4B, 4C:

<All the safety rules and organiser guides which were in the Supplement to Sections 4a, 4b, 4c, 4d and 4e of the January 1998 edition of the CIAM Sporting Code, including the "General Organisation of a World Championship", which was omitted from the 2002 edition of the CIAM Sporting Code, now be included in CIAM Volume ABR, Section 4 or in an appropriate place in the rules>.

Reason: Clarification. These guides have been compiled as a result of many years of experience in organising championships in many disciplines. Some do not seem to have been included in the 2002 rules. It has been apparent at several recent World and European Championships that a number of difficulties could have been avoided had the organisers been aware of the relevant Organisers Guide and followed its recommendations. It should not be left for team managers' meetings to draw the attention of event organisers to some of the basic needs for the smooth running of a Championships.

Section 4B - General Rules For International Contests

a) B.1. General Definition of International Contests – F2 Subcommittee. Add the following sentence:

<Any model aircraft and spacemodelling event in which the competitors are persons or teams from at least two different nations. **In the case an event comprises more than one competition class, each competition class must have competitors from at least two different nations.** Organised by the NAC……>.

Reason: Clarification. To avoid the possible misconception that it is acceptable to have competitors from just one nation in one competition class if there are competitors from other nations in other classes. Application: January 1st 2004.

b) B.3.2. Sporting Licenses

i) Sweden – Change the paragraph as follows:

<Every competitor, **official helper**, team manager and assistant team manager entering an international contest must possess a valid Sporting Licence of the FAI. This Sporting licence is issued by the NAC of the competitor, **official helper**, team manager……>.

Reason: It is essential that both the competitors and the official helpers do know, understand and will abide by the Sporting Code and the rules and the regulations for the event. If disciplinary actions must be taken, the sporting licence may be withdrawn.

ii) Poland – Change the paragraph as follows:

<Every competitor, team manager, assistant team manager, **helper and mechanic** entering an international contest must possess a valid Sporting Licence of the FAI. (….)>.

Reasons: **1)** To distinguish between helper/mechanic and supporter.
2) Responsibility and safety: "The holder of the licence with his/her signature acknowledges that he/she knows and understands the FAI Sproting Code and agrees to abide by them" (according to the Sporting Code, General Section, Chapter 8 - FAI Licences, para. 8.1.7.). Helper/mechanic must know all the details including the danger he/she can expect while being at the flying site/starting line.
3) To permit some form of sanction action to be taken against helper/mechanic breaking the rules, behaving in dangerous or unsportsmanlike way.

c) B.3.4. Age Classification for the Contest – Germany. Add this new paragraph c):

c) <If the current junior World or Continental champion is too old to defend his/her title at the next World or Continental Championship, he/she will get a wild card to participate at the next World or Continental Championship in the seniors class. This wild card allows him/her to compete in the seniors class at the next World or Continental Championship but not automatically in the national team of his/her country>.

Reason: It will be a great motivation for the actual junior champion and also a big challenge to be in the international sport of his class for the next time. Many of the young sportsmen may think about that they will have no chance to reach a world- or continental championship in the senior's class, so they will finish the sport. You can observe that especially young people at the age between 16 and 20 have more and more problems to do their sport seriously; many other things will distract them with other "interests". Perhaps if they get a new chance for the future, they will do their sport also for the future. Another thing will be to equalize the methods for the former juniors with the actual senior's world or continental champion. This proposal might also be adapted for all the free-flight classes, where junior championships are hold.

d) B.4.1. FAI Jury – Sweden. Change paragraph B.4.4. as follows:

Replace: ~~<Members of the Jury may not compete in the event except when the timetable gives a sub-division into categories…….”~~
With: **<Members of the Jury may not compete in the event except when the contest has a subdivision into categories…..”**

Reason: Clarification. It is not necessary to have a timetable to sub-divide a contest into categories. At normal open international competitions in F1 and F2 the separate categories are flown at the same time. It is the general practice at many contests to nominate competitors as FAI Jury members. Application January 1st 2004.

e) B.5. Organisation of International Contests – United Kingdom. Change the second sentence in paragraph B.5.1. as follows:

<NACs organising such contests should ensure that those responsible for planning the event are familiar with the CIAM documents "General Organisation of a World Championship", the relevant Safety Guides and other Organisers' and Judges' Guides, and that the guidance contained therein is followed>.

Reason: Clarification. These guides have been compiled as a result of many years of experience in organising championships in many disciplines. Some do not seem to have been included in the 2002 rules. It has been apparent at several recent World and European Championships that a number of difficulties could heve been avoided had the organisers been aware of the relevant Organisers Guide and followed its recommendations. It should not be left for team managers' meetings to draw the attention of event organisers to some of the basic needs for the smooth running of a Championships.

f) B.5.2. World and Continental Championships Events – Netherlands. Add this sentence at the end of the paragraph:

<Before the end of August of the previous year, the dates and place of the Championship should be presented to the FAI Office for publishing on the FAI website>.

Reason: To be able to find sponsors and/or ask for other funds in time.

g) B.10. Radio Control – Czech Republic. Add the following sentence at the end of paragraph B.10.2:

<Using a frequency differing from that assigned by the organizer in the starting list, except if the contest director allows the change in advance, is considered unauthorized transmission>.

Reason: Clarification. Some pilots think that if they register more frequencies before the contest they have free choice of them during the contest.

h) B.16. Complaints and Protests – Sweden. Add this new paragraph at the end of B.16.2.:

NOTE: A complaint may also be filed. The purpose of a complaint is to obtain a correction without the need to make a formal protest. See Sporting Code – General Section, Chapter 5>.

Reason: To make it easier for the competitors and team managers to obtain correction. The principle and procedure is described in the Sporting Code General Section Chapter 5. By adding this new paragraph section 4 will not contradict the General Section.

Section 4C – Model Aircraft
General Regulations and Rules for Contests and Records

Part One – General Regulations for Model Aircraft

a) 1.3.3. Category F3 Radio Controlled Flight - France

Add a new provisional class: **F3L Lighter than air**

Reason: ***Lighter Than Air*** are flown in several countries and record attempts/competitions may be set up. We need to recognize this new class and have common rules in order to ratify these new records. National/International competitions may also be organized, and should be mentioned on the FAI calendar. Rules are at **ANNEX 6** to this Agenda.

b) 1.3.4. Category F4 Scale Model Aircraft – Scale Subcommittee. Add the following text under F4B definition:

Class F4B - Control Line Flying Scale Model Aircraft
<Control Line Flying Scale Model Aircraft are powered model aircraft equipped with aerodynamic surfaces to generate lift. All such model aircraft shall be permanently attached to two or more non-extensible wires or cables during flight. Control Line Flying Scale Model Aircraft's flying height (the "Primary Control Function") shall only be performed by mechanically-activated flight control elements. This Function must be controlled by a hand-held control handle manipulated by the pilot located on the ground at the centre of the model aircraft's Flight Circle. No automatic control of the Primary Control Function shall be permitted.
The model aircraft's Secondary Control Functions may include (but are not limited to) control of engine/s, landing gear, landing flaps. Secondary Control Functions may be controlled by the pilot via wires/cables, or may function completely automatically. The frequency of any electro-magnetic pulses sent through wires/cables shall not exceed 30 kHz.
No control of either Primary or Secondary Control Functions other than through wires/cables shall be permitted.
Any provisions additional to those above which are detailed within the rules of the model aircraft class F4B shall also apply>.

Reason: This F4B definition is to get a more modern and accurate description of the class, also to have the text inline with the new F2 Class definition.

Part Seven - Records

a) 7.2. General Specifications of Model Aircraft for Record Attempts – Sweden. Change as follows:

7.2.11. Flying site.
<Duration and Distance in Closed Circuit records for powered model aircraft (any power source) shall be made without any benefit of slope lift, rotors, lee waves and similar forms of lift. The land within sufficient distance from the course must be free from objects which during the attempt is generating such lift including but not limited to hills, tree lines, vehicles and hand held devices>.

Reason: The current paragraph 7.2.11. in the Sporting Code section 4 raise severe obstacles for any attempt on records for Duration and Distance in Closed Circuit. The requirement (of flatness) on the ground is so severe that even many indoor floors fail to meet those demands. The proposed writing focuses on restricting the use of lift rather than the slope of the ground.

b) 7.11. Supporting Data – Sweden. Add at the end of the paragraph:

<For Duration and Distance in Closed Circuit records for powered model aircraft (any power source), a statement must be made which shows beyond reasonable doubt that the requirements of paragraph 7.2.11. Flying Site have been met. Documentation such as photographs, maps and weather observations may be part of such statement>.

Reason: The current paragraph 7.2.11. in the Sporting Code section 4 raise severe obstacles for any attempt on records for Duration and Distance in Closed Circuit. The requirement (of flatness) on the ground is so severe that even many indoor floors fail to meet those demands. The proposed writing focuses on restricting the use of lift rather than the slope of the ground.

VOLUME F1 - SECTION 4C - MODEL AIRCRAFT F1 FREE FLIGHT

Part Three - Technical Regulations For Free Flight Contests

3.1. CLASS F1A - GLIDERS

a) 3.1.7 Duration of Flights - Free Flight Subcommittee

Add the following new text at the end of paragraph 3.1.7:

<**Maximum durations greater than three minutes should only be used for rounds at times when wind and thermal activity are expected to be at a minimum>.**

Reason: Clarification. To clarify that extended flight times are to be used only when conditions are suitable. Corresponding change also proposed for F1B and F1C. Application: January 2004.

b) 3.1.7 Duration of Flights - Free Flight Subcommittee

Modify first paragraph of 3.1.7 to read:

<The maximum duration to be taken for the official flights in world and continental championships is four minutes for the first round and three minutes for subsequent rounds. **In other international events a maximum of three minutes will be used for all rounds unless different durations (not exceeding four minutes) have been announced in advance in the contest bulletin for specific rounds>.**

Reason: Clarification. To clarify the application of the extended maximum to open internationals. The current wording suggesting the use of the extended max has been taken as an instruction to use it even when conditions or flying fields may not be suitable. The proposal places the onus on a positive statement for an extended max to be used, otherwise 3 minutes to be used for all rounds. Application: January 2004 (not affecting Championships).

c) 3.1.11 Launching Devices - Free Flight Subcommittee Add to the end of 3.1.11.a:

<Metal cables are prohibited>.

Reason: Safety. One risk is from lightning strike even when dry. The other risk is injury to people walking or running into a line when held above the ground on the field, since metal lines are smaller diameter than lines with the same strength from other materials. Application: January 2004.

3.2. CLASS F1B - MODEL AIRCRAFT WITH EXTENSIBLE MOTORS

a) 3.2.7 Duration of Flights - Free Flight Subcommittee. Add at the end of the paragraph:

<Maximum durations greater than three minutes should only be used for rounds at times when wind and thermal activity are expected to be at a minimum>.

Reason: Clarification. To clarify that extended flight times are to be used only when conditions are suitable. Corresponds to change proposed for F1A. Application: January 2004.

b) 3.2.7 Duration of Flights - Free Flight Subcommittee. Modify first paragraph to read:

<The maximum duration to be taken for the official flights in world and continental championships is five minutes for the first round and three minutes for subsequent rounds. **In other international events a maximum of three minutes will be used for all rounds unless different durations (not exceeding five minutes) have been announced in advance in the contest bulletin for specific rounds>.**

Reason: Clarification. To clarify the application of the extended maximum to open internationals. The current wording suggesting the use of the extended max has been taken as an instruction to use it even when conditions or flying fields may not be suitable. The proposal places the onus on a positive statement for an extended max to be used, otherwise 3 minutes to be used for all rounds. Application: January 2004 (not affecting Championships).

3.3. CLASS F1C – MODEL AIRCRAFT WITH PISTON MOTORS

a) 3.3.7 Duration of Flights - Free Flight Subcommittee. Add at the end of the paragraph:

<Maximum durations greater than three minutes should only be used for rounds at times when wind and thermal activity are expected to be at a minimum>.

Reason: Clarification. To clarify that extended flight times are to be used only when conditions are suitable. Corresponds to change proposed for F1A. Application: January 2004.

b) 3.3.7 Duration of Flights - Free Flight Subcommittee. Modify first paragraph to read:

<The maximum duration to be taken for the official flights in world and continental championships is five minutes for the first round and three minutes for subsequent rounds. **In other international events a maximum of three minutes will be used for all rounds unless different durations (not exceeding five minutes) have been announced in advance in the contest bulletin for specific rounds."**

Reason: Clarification. To clarify the application of the extended maximum to open internationals. The current wording suggesting the use of the extended max has been taken as an instruction to use it even when conditions or flying fields may not be suitable. The proposal places the onus on a positive statement for an extended max to be used, otherwise 3 minutes to be used for all rounds. Application: January 2004 (not affecting Championships).

ANNEX – RULES FOR WORLD CUP EVENTS – FREE FLIGHT W/CUP

a) Paragraph 10 Jury – Sweden. Replace the whole paragraph with:

<A Board of Judges of three responsible people shall be nominated by the CIAM Free Flight Subcommittee to control that the Organisers have followed the Sporting Code rules and regulations>.

Reason: Clarification. The procedures of protests and appeals are clearly described in the Sporting Code General Section Chapters 5 and 9. In aeromodelling, we can't have rules in contradiction to the General Section. Application: January 2004.

CLASS F1H – GLIDERS (provisional rules)

a) 3.H.11 Launching Devices - Free Flight Subcommittee.Add to the end of 3.H.11a:

<Metal cables are prohibited>.

Reason: Safety. One risk is from lightning strike even when dry. The other risk is injury to people walking or running into a line when held above the ground on the field, since metal lines are smaller diameter than lines with the same strength from other materials. Application: January 2004.

CLASS F1J - MODEL AIRCRAFT WITH PISTON MOTORS (provisional rules)

a) 3.J.2 Characteristics of Model Aircraft with Piston Type Motors - Free Flight Subcommittee

Replace the sentence <Maximum duration of motor run 7 seconds from release of model> by

<Maximum duration of motor run 5 seconds from release of model>.

Reason: The current performance of F1J models is high for the 2 minute maximum. Reducing the motor run to 5 seconds will give performance more compatible with the maximum and is also consistent with F1C. Application: January 2004.

VOLUME F2 - SECTION 4C - MODEL AIRCRAFT F2 CONTROL LINE

Part Four - Technical Regulations for Control Line Contests

4.3 CLASS F2C – TEAM RACING MODEL AIRCRAFT

a) 4.3.2. Team Racing Site – United Kingdom

i) Change the first sentence as follows:

<A team racing site must consist of ~~two~~ **three** concentric circles which shall be marked on the ground>.

Reason: Safety. See the reasons attached to the proposed change to add section (c) to paragraph 4.3.2 which follows.

ii) Add a new subparagraph c) to paragraph 4.3.2.:

4.3.2.c: Circle at 2m radius, and known as the inner circle, shall be marked with a broken line in a contrasting colour>.

Reasons: Safety. **1)** Fast acceleration of models on take-off can cause pilots to be behind their models when joining the other pilots in the centre circle. This can cause problems if the pilots have drifted away from the middle of the centre circle. (Please note that the term used in the Sporting Code to describe the circle in which the pilots must stay is 'centre circle' although it is often incorrectly referred to as the 'pilots' circle). **2)** This new 'inner' circle within the centre circle would act as a visual reference to aid the pilots to maintain a more central position within the centre circle during the race. It would also help the F2C Jury to more easily determine the pilot's positions within the centre circle. **3)** If the pilots were able to more easily maintain a central position then: **3.1,** The subsequent shorter distance required on take-off to join the other pilots still flying would reduce the potential for accidents, especially if less experienced or less agile pilots were racing. **3.2**, Landing pilots would have an increased free area in which to run around to their pit segments with less risk of them being forced out of the centre circle and consequently suffering disqualification. **4)** Stepping outside the 2m 'inner' circle should not incur a penalty or warning. **5)** The 'inner' circle has been used in the UK for the whole of the 2002 racing season and has resulted in: **5.1,** The pilots themselves being able to maintain a more central position within the centre circle. **5.2,** The jury officials being more able to accurately determine where the pilots were in relation to the middle of the centre circle. **5.3,** The jury officials did not have to advise the pilots to move to the middle of the centre circle as frequently as had been necessary previously.

b) 4.3.5. Controls / Technical Verification – F2 Subcommittee. Insert a new paragraph:

4.3.5.d. <If the engine has an integral head or extremely tight fitted piston liner assembly, the entrant must provide tooling to allow the piston connecting rod & shaft assembly to be rotated through 360 degrees. A dummy cylinder would be ideal>.

Reason: Safety. If the proposal to change Annex 4E is approved, then it will be necessary to have an additional paragraph as above.

c) 4.3.7. Race from Start to Finish – F2 Subcommittee

i) 4.3.7.d. – Add the following text:

<… and the pilots must be crouching on the border of the centre circle**, with one hand touching the ground and** with their control handles as close to the ground as defined by the F2C panel of judges>.

ii) 4.3.7.m. – Add the following text:

<During that time the pilot must be crouching or sitting inside the centre circle. He keeps **one hand on the ground and** his handle and his lines as close>.

Reasons: Safety. There has become a tendency with some pilots to stand semi upright during starts and pit stops causing safety problems to the other pilots. One hand touching the ground has been tested in several competitions with no complaints from the pilots and the obedience is easy to see for the judges. Application: January 2004.

d) 4.3.9. Warnings – Eliminations

i) 4.3.9.f. – F2 Subcommittee. Add the following text:

<during the pit stops, **one hand is not on the ground**, the control handle, the lines and the model aircraft….>.

Reason: Safety. There has become a tendency with some pilots to stand semi upright during starts and pit stops causing safety problems to the other pilots. One hand touching the ground has been tested in several competitions with no complaints from the pilots and the obedience is easy to see for the judges. Application: January 2004.

ii) 4.3.9.k. – United Kingdom. Change paragraph to read:

<If the mechanic steps into the flight circle with both feet or lies down in the circle to retrieve his model>.

Reason: Safety and Clarification. **1)** The present, recently introduced penalty of instant disqualification if a pitman puts even half a foot into the flight circle is too severe and does not necessarily serve to increase the pitman's safety. **2)** Rather, it effectively increases the potential danger to the pitman. He now has to bend his head to look at his feet to make sure he has not stepped over the flight circle line rather than keeping his head up, thus increasing his field of vision whilst retrieving his model. **3)** It is not possible to accurately determine the 0.5 metre point inside the flying circle and so it is not possible to apply the rule fairly.

e) 4.3.10. Team Qualification and Classification

i) 4.3.10.a. F2 Subcommittee. Change as follows:

4.3.10.a) Each competing team must take part in at least one eliminating race to qualify for the semi-finals. **The contests will be organised on three eliminating races and if there are no semifinalists then all teams are allowed four eliminating races>.**

ii) 4.3.10.b. F2 Subcommittee. Change as follows:

Number of teams……Number of semifinalists
2 up to and including **8**……0
9 up to and including **11**……..6
12 up to and including 39……9
40 or greater……12

The 6, 9 or 12 teams which register the 6, 9 or 12 best times respectively during the three eliminating races qualify for the semi-finals. ~~If there are no semifinalists then all teams are allowed three eliminating races.~~

Reasons: To make the international competitions more interesting to the teams by allowing more flights per competition. Application: January 2004.

iii) 4.3.10.e. F2 Subcommittee. Change as follows:

<The three teams having registered the three best times during the semi-finals qualify for the final race. **In the case that no semi-final flights have taken place, the three teams having registered the three best times during the eliminating races qualify for the final race>.**

Reason: Clarification.The Sporting Code does not clearly state the qualifying process when no semi-finals are flown. Application: January 2004.

iv) 4.3.10.f. United Kingdom. Change the second paragraph to read:

<All teams not participating in the finals will be classified according to their best time in any single eliminating race. Classification of any team that retired from any race, or exceeded the official time limit for any race but was not disqualified, shall be ranked according to the number of laps completed>.

Reasons: Clarification. **1)** The existing rule permits manipulation by teams to enhance national team results. **2)** Elimination races are more equal than semi-finals and would result in a fairer classification for all countries.

f) 4.3.11. International Team Classification – United Kingdom. Change as follows:

<International team classification is established by adding the best time achieved by each of the individual teams in the eliminating races. A junior team's best time may be considered as one of the times. The team with the lowest combined time is ranked first, etc, with complete three-team teams ahead of two-team teams which in turn are ranked ahead of single team entries>.

Reasons: Clarification. **1)** The existing rule permits manipulation by teams to enhance national team results. **2)** Elimination races are more equal than semi-finals and would result in a fairer classification for all countries.

4.4. CLASS F2D - COMBAT MODEL AIRCRAFT

a) 4.4.6. Controls – Technical Verification – F2 Subcommittee. Change paragraph 4.4.6.e as follows:

<The silencer(s) on the glow engines shall have a round exhaust the rear most end of which will not admit a **6.05 mm** (one silencer) or **4.25 mm** (two silencers) diameter plug gauge(s)>.

Reason: Safety. Change will reduce both speed and noise and reduce risk of flyaway.

ANNEX 4A – CLASS F2A – JUDGES' GUIDE

a) Rule 4.1.4 Diameter of Control Lines – F2 Subcommittee. Replace the second paragraph with:

<A micrometer, as detailed in 8.1.1 of Annex 4E Control Line Organisers' Guide, must be supplied and used by the contest organisers to measure the control line wires>.

Reason: If the proposal to change Annex 4E is approved, then it will affect the above paragraph and the paragraph should, therefore, be amended.

ANNEX 4D – CONTROL LINE WORLD CUP RULES

a) 4D.4 Points Allocation – F2 Subcommittee. Replace paragraph 4D.4 by the following paragraph :

<In each competition, points in a class will only be allocated if the competitors who have completed a flight in that class are from at least two different countries. A competitor (team in F2C) has completed a flight if :

- **he registers a speed not equal to zero (0) in F2A.**
- **he registers a score not equal to zero (0) in F2B.**
- **he registers a time not equal to zero (0) in F2C.**
- **he flies in a heat in F2D.**

In F2A, the points allocated to each competitor will be the same as the achieved speed result in km/h.
In F2B, F2C and F2D, the points to be allocated to competitors (teams in F2C) will depend on the number (N) of competitors (teams in F2C) who will have completed at least one flight in the event.
Points are allocated to competitors (teams in F2C) who will have completed at least one flight according to their placing in the results given in the following tables:

……number of points.

Reasons: For World Cup, it seems reasonable to consider that (for each class) competitors who have completed a flight must be from at least two different countries. In F2A, the actual system does not take in account the performance but only takes in account the placing, which is not particularly suited to the F2A class.

b) 4D.5 Classification – F2 Subcommittee. Modify as follows the first sentence:

<The World Cup results are determined by considering the total of points obtained by each competitor (team in F2C) in the World Cup events. Up to three events may be counted, selecting each competitor's (team's in F2C) best scores during the year. The winner of the World Cup is the competitor (team in F2C) with the greatest total. **In F2A, competitors with three counted events will be ranked ahead of competitors with two counted events which in turn are ranked ahead of competitors with one counted event**>.

Reasons: For World Cup, it seems reasonable to consider that (for each class) competitors who have completed a flight must be from at least two different countries. In F2A, the actual system does not take in account the performance but only takes in account the placing, which is not particularly suited to the F2A class.

c) 4D.10 Board of Judges – Sweden. Replace the first paragraph with:

<A Board of Judges of three responsible people shall be nominated by the CIAM Control Line Subcommittee to control that the Organisers have followed the Sporting Code rules and regulations>.

Reason: Clarification. The procedures of protests and appeals are clearly described in the Sporting Code General Section Chapters 5 and 9. In aeromodelling, we can't have rules in contradiction to the General Section. Application: January 2004.

ANNEX 4E – CONTROL LINE ORGANISERS' GUIDE

a) 8. Equipment – F2 Subcommittee

i) 8.1. Speed – Delete the following words from the paragraph:

~~1 micrometer1/100mm resolution~~

~~1 depth micrometer~~
~~1 internal diameter micrometer with its calibrating tool (0-15mm)~~

ii) Create a new paragraph 8.1. Measuring Equipment Specification

8.1 Measuring Equipment Specification:
The contest organisers should procure the following minimum equipment for use at the Championships:

8.1.1 Line Measuring

1. **A good quality electronic digital reading micrometer with a friction thimble, measuring graduations of 0.001 mm and with an accuracy of +- 0.001 mm. The instrument should have a recent calibration certificate. (This will resolve any anticipated problems with the thimble torque.)**
2. **Three lever operated thickness gauges with measuring graduations of 0.01 mm for Speed, Team Race and Combat.**
3. **Pin gauges of 0.3 mm for Team Race and 0.4 mm diameter for Speed and Combat to DIN 2269 standard to calibrate the micrometer and thickness gauge**.

8.1.2 Engine Measuring

1. **For measuring the bore a minimum of a self-centring (three-point) micrometer gauge with a minimum graduation of 0.005 mm and an accuracy of +- 0.002 mm should be used. A standard sizing ring appropriate to the instrument and manufactured to the appropriate DIN standard must also be supplied in order to calibrate the bore gauge prior to use.**

2. **For measuring the stroke a dial gauge with a minimum of 20 mm travel, a minimum graduation of 0.01 mm and an accuracy of +- 0.020 mm fitted with a suitable stop to rest on the top of the liner should be used. For measuring an engine which is close to top limit of capacity, a 0 to 25 mm depth micrometer with minimum graduations of 0.005 mm and an accuracy of +- 0.002 mm should be used. The dial gauge is the preferred instrument for stroke measurement because of its ease of use.**

3. **A set of digital callipers is required for measuring the bore of Aerobatics engines.**

iii) 8.2. Aerobatics. Delete the following words from the paragraph:

~~1 micrometer1/100mm resolution~~
~~1 depth micrometer~~

iv) Create a new paragraph 8.2. Measuring Equipment Method of Use

8.2 Measuring Equipment Method of Use

8.2.1 Methodology for Line Measuring Equipment
The pin gauges should be used to set a zero on the thickness gauge, which is light, easy to use and requires minimum skill to operate. The calibrated digital micrometer would only be used in the case of a dispute where lines are at or near bottom limit. An electronic digital micrometer is specified because it is much easier to use and clearer to read. It must be fitted with a friction thimble and *not a ratchet thimble*.

8.2.2 Methodology for Engine Measuring Equipment
There are different problems associated with measuring Speed, Combat and Team Race engines. These problems are related to the fit and construction of Team Race engines.

8.2.2.1 Speed & Combat Engines
On engines using removable heads, as commonly used in Speed and Combat and where it is possible to turn the engine over TDC easily, the bore should be measured at or near TDC as currently specified.

The stroke should be measured using the dial gauge supported on a suitable foot and mounted on the top of the crankcase or liner.

8.2.2.2 Team Race Engines
Team Race engines present very different problems for measurement because of the tight fit of the piston in the liner. The relatively high interference fit between the piston and the liner does not however mean that it is invalid to use the liner diameter at TDC as the measuring point for bore diameter.

On Team Race engines, which have integral heads, the bore diameter must be measured from the bottom of the liner. The diameter should be measured at the point at which the piston interferes with the bore. If this cannot be established, then the bore should be measured 2,5 mm below the height of the piston crown at TDC. This point should be below any carbon band which would reduce the apparent bore of the cylinder. Alternatively, as is current practice, the piston diameter can be measured. The piston should me measured at its maximum diameter point.

Wherever possible the stroke on Team Race engines should be measured in the same way as for Speed and Combat. Where this is not possible because of the use of integral heads or extremely tight fitted piston liner assemblies, the entrant must provide tooling to allow the piston connecting rod & shaft assembly to be rotated through 360 degrees. A dummy cylinder would be ideal.

v) 8.3. Team Racing – Delete the following words from the paragraph:

~~1 micrometer1/100mm resolution~~
~~1 depth micrometer~~
~~1 internal diameter micrometer with its calibrating tool (0-15mm)~~

vi) 8.4. Combat – Delete the following words from the paragraph:

~~1 micrometer1/100mm resolution~~
~~1 depth micrometer~~
~~1 internal diameter micrometer with its calibrating tool (0-15mm)~~

vii) Renumber the paragraph as follows:

8.3 Speed
8.4 Aerobatics
8.5 Team Race
8.6 Combat
8.7 Secretariat

Reasons: Line Measuring: We have to be aware of the fact that the people doing the checking may not be engineers and will not, therefore, be familiar with the use of precision measuring equipment and we need to avoid the problems encountered with line measuring at the 2002 World Championships. **Engine Measuring:** To introduce commonality of technique when measuring engine capacity.

ANNEX 4G – CLASS F2F (provisional class) – Diesel Profile Racing Model Aircraft

a) 4.G.4. Characteristics of a Diesel Profile Racing Model Aircraft - Spain. Modify the paragraph as follows:

e) The engine must be diesel type with suction feed. **The cylinder/piston must be of the kind steel/steel.** Propeller must be commercially available**, minimum diameter 175 mm**>.

Reason: The intended aim for F2F category is promoting the team race existing category for all those who want to start in it at a low cost, mainly young people, to enter later in FAI category. At present, it is allowed to use any kind of FAI engine, which are high technology, and many contestants cannot fly at that level. The steel/steel piston engines propose are commercially available at a reasonable low cost and anyone can afford them. If we put a restriction on the minimum diameter of the propeller, we also limit the performance of the engine. In this way, we give equal opportunities to all contestants in this new category and encourage them to make an effort to go further.

b) 4.G.7. Race from Start to Finish – F2 Subcommittee. Add the following text:

i) 4.G.7.d). Amend as follows:

<… and the pilots must be crouching on the border of the centre circle**, with one hand touching the ground and** with their control handles as close to the ground as defined by the F2C panel of judges>.

ii) 4.G.7.m). Amend as follows :

<During that time the pilot must be crouching or sitting inside the centre circle. He keeps **one hand on the ground and** his handle and his lines as close>.

c) 4.G.9.f. Warnings/Eliminations – F2 Subcommittee. Add the following text:

<during the pit stops, **one hand is not on the ground**, the control handle, the lines and the model aircraft>.

Reasons: Safety. There has become a tendency with some pilots to stand semi upright during starts and pit stops causing safety problems to the other pilots. One hand touching the ground has been tested in several competitions with no complaints from the pilots and the obedience is easy to see for the judges. Application: January 2004.

VOLUME F3A - RADIO CONTROL AEROBATICS

Part Five - Technical Regulations for Radio Controlled Contests

CLASS F3A - AEROBATICS POWER MODEL AIRCRAFT

a) Create a new class F3A/L - France

Establish a new provisional class F3A/L, Aerobatics Large Model Aircraft. Rules are at ANNEX 7 to this Agenda.

Reason: In many countries, RC pilots are flying Large Model aircraft on aerobatics schedules. These model aircraft are very attractive for public and media, so it becomes necessary to have common international rules in order to organise competitions between nations and to have these competitions on the FAI calendar.

VOLUME F3B J - SECTION 4C - MODEL AIRCRAFT F3B THERMAL SOARING F3J THERMAL DURATION GLIDERS

Part Five – Technical Regulations for Radio Control Contests

5.3. CLASS F3B - THERMAL SOARING MODEL AIRCRAFT

a) 5.3.1.3. Characteristics of F3B Model Aircraft – Czech Republic

Add at the end of the second sentence of paragraph 5.3.1.3.b to read:

<Any device for transmission of information from the model to the pilot is prohibited. **Any use of telecommunication devices (including transceivers and telephones) in the field by competitors, helpers or team managers is not allowed**>.

Reason: Clarification. With transreceivers on the field it is difficult to put in force the rule 5.3.1.4 which says: <Helpers must not give any turning signals near base B during tasks B and C>.

b) 5.3.2. Rules for Thermal Soaring Contests – USA. Add at the end of paragraph 5.3.2.1.:

<If repairs to the models (primary structure) are necessary during a round, the repairs must be carried out using only parts from the damaged model, or raw materials. In no case may parts from another model be used for the repairs>.

Reason: This addition is proposed as a clarification to the existing rule. To assure that all flights within a round are completed by the same model.

c) 5.3.2.2. Launching

i) 5.3.2.2.b.a(2)a – Germany. Change as follows:

The power source shall be a 12 volt lead/acid battery. The maximum cold cranking ampere capability should be not more than

300 amperes DIN or
355 amperes IEC or
500 amperes SAE or
510 amperes max. according to EN 60095-1 (10s/7.5V at –18°C)

Reason: Immediate clarification. The value of 495 amperes EN is not yet correct; the correct value has changed to 510 amperes

5.6. CLASS F3J - THERMAL DURATION GLIDERS

a) 5.6.3. Contest Flights – Germany. Change paragraph e) as follows**:**

e) All attempts are to be timed by two stopwatches. In the event of both stopwatches malfunctioning, **the competitor is entitled to a new working time according to the priorities mentioned in paragraph 5.6.4.**

Reasons: Clarification of the rules.This paragraph shall be congruent to the priorities mentioned in paragraph 5.6.4.

b) 5.6.4. Reflights

i) Germany – Change the whole paragraph as follows:

The Competitor is entitled to a new working time if:
a) his model in flight **or in the process of being launched** collides with another model in flight, or with a model in the process of being launched.
b) his model in flight or in the process of being launched collides with another competitors towline.
c) the attempt has not been judged by the official time-keepers.
d) his attempt was hindered or aborted by an unexpected event, not within his control.

To claim a reflight considering the above mentioned conditions, the competitor has to make sure that the official time-keepers have noticed the hindering conditions and land his model immediately after this event.

Note that in the case the competitor continues to launch **or continues to fly after hindering conditions effected his flight** or relaunches after clearing of the hindering conditions, he is deemed to have waived his right to a new working time.

The new working time is to be granted to the competitor according to the following order of priorities:
1) in an incomplete group, or in a complete group on additional launching/landing spots;
2) if this is not achievable, then in a new group of several (minimum 4) reflyers;
3) if this is also not achievable, then with his original group at the end of the ongoing round.

In priority-case 3, the better of the two results of the original flight and the reflight will be the official score, except for the pilots who are allocated the new attempt. For those the result of the **reflight** is the official **score**. A competitor of this group who was not allocated the new attempt will not be entitled to another working time in case of hindering.

Reasons: Clarification of the rules. Easier handling of reflights during a running competition.

ii) Czech Republic. Amend as follows:

Replace the sentence:

~~<Note that in the case the competitor continues to launch or does relaunch after clearing of the hindering condition(s), he is deemed to have waived his right to a new working time>~~

by:

<If the competitor intends to use his right for new working time he or his team manager must immediately ask the timekeeper for confirmation of the event and if the event is confirmed the competitor must immediately and clearly express to the timekeeper his intention to ask for new working time. Otherwise he is deemed to have waived his right to a new working time. After the request the timekeeper marks zero for the pilot in this group>."

Replace the words:

~~"his original group at the and of the ongoing round."~~

by:

<the group of reflyers will be completed by other competitors selected by random draw to the number of 4. If the frequency of the drawn competitor does not fit, the draw is repeated>.

Reason: Clarification. During the F3J World Championships at Lappeenranta some weak points of our present rules came out. In spite of being improved in recent years the paragraph "5.6.4 Reflights" does not represent a reliable guideline for the organizers. The International Jury had to deal with four protests connected with this paragraph. The discussion continued at the Technical Meeting held on the Lappeenranta airfield. It was stated that the amendment of paragraph 5.6.4. is necessary. It is proposed to create the new group by draw, because the reflight of the original group is sometimes misused by one of the colliding competitors.

ANNEX 3A – RULES FOR WORLD CUP EVENTS

a) Paragraph 10 Jury – Sweden. Replace the whole paragraph with:

<A Board of Judges of three responsible people shall be nominated by the CIAM R/C Soaring Subcommittee to control that the Organisers have followed the Sporting Code rules and regulations>.

Reason: Clarification. The procedures of protests and appeals are clearly described in the Sporting Code General Section Chapters 5 and 9. In aeromodelling, we can't have rules in contradiction to the General Section. Application: January 2004.

5. F. CLASS F3F - RADIO CONTROL SLOPE SOARING (Provisional Rules)

a) 5.F.5. Number of Attempts – United Kingdom. Add new sub-paragraph:

d) The model (i.e the centre of gravity) fails to pass above a horizontal plane, level with the starting area, within five seconds of exiting the course, due to circumstances beyond the control of the pilot, duly witnessed by the official judges.

Reason: Safety. This proposed rule will discourage the pilot from flying the model progressively further down the slope, which as a consequence increases the probability of having to land at a great distance away from the pilot.

b) 5.F.6. Cancellation of a Flight – United Kingdom. Add new sub-paragraph h):

h) The model (i.e. the centre of gravity) fails to pass above a horizontal plane, level with the starting area, within five seconds of exiting the course.

Reason: Safety. This proposed rule will discourage the pilot from flying the model progressively further down the slope, which as a consequence increases the probability of having to land at a great distance away from the pilot.

5. I. CLASS F3I - AERO TOW GLIDERS (Provisional Rules)

a) 5.I.1.4. Characteristics of an Aero-Tow Glider - Belgium

Add the following after specification of fuselage width :

<The fuselage height, measured in cm at the maximum cross section, excluding the fillets, shall be at least equal to 4% of the glider wingspan (example 400 cm x 4% = 16 cm)>.

Reason: This item of the model specifications was part of the text in the receding edition. It has been accidentally forgotten in the present edition. To keep the semi-scale character of the model, it is essential to keep specification for both width and height.

VOLUME F3C - SECTION 4C - R/C HELICOPTERS

Part Five – Technical Regulations for Radio Controlled Contests

a) 5.4.14. Manoeuvre Schedules – F3C Subcommittee. Change the paragraph as follows:

<The competitor has ~~9~~ 10 minutes to complete schedule A>.

Reason: Clarification. When the 2002 program was written, we underestimated the time required to complete schedule A manoeuvres.

ANNEX 5D – F3C MANOEUVRE DESCRIPTION

a) Annex 5D – F3C Subcommittee

Remove the word "immediately" from first and second-to-last sentences.

Reason: Clarification. We have a conflict between downgrade number 4 and these words. If the rolls are performed immediately after the quarter loop and 180 degree stall turn they cannot be at the same altitude.

VOLUME F3D - SECTION 4C - F3D PYLON RACING

Part Five - Technical Regulations for Radio Control Contests

5.2. CLASS F3D - PYLON RACING MODEL AIRCRAFT

a) 5.2.1. Definition of Radio Control Pylon Racing Model Aircraft - Sweden

Delete: <~~A pylon team shall consist of a pilot and a mechanic/caller…… from the beginning of the competition through to its end~~>.

New text: <**The pilot is the competitor. All pilots must be accompanied by a caller/mechanic for reasons of safety. The caller can be the team manager, another competitor from the same national team or a third party. In all cases the caller must be the holder of an FAI licence, not necessarily issued by the NAC of the competitor. Each pilot and mechanic/caller shall be registered together from the beginning of the competition through to its end**>.

Reason: Clarification according to Sporting Code General Section 3.2.3. A team is a group of competitors. The mechanic/caller has never been considered a competitor however vital he is for the result of the competing pilot. As the mechanic/caller is not a competitor, he shall only pay a fee for official helpers as outlined in Section 4 B.6.2.

VOLUME F4 - FLYING SCALE MODEL AIRCRAFT
F4B, CONTROL LINE SCALE
F4C, RADIO CONTROL SCALE

Part Six - Technical Rules for Flying Scale Model Aircraft Contests

a) New class F4A Free Flight Engine Powered Scale – New Zealand

Establish a new provisional class F4A – Free Flight Engine Powered Scale.

Rules are at ANNEX 8 to this Agenda.

Reasons: This proposal is intended to provide an International Standard under FAI Rules for Free Flight Power Scale models. It is proposed that the Free Flight Power Scale Rules (Scale Outdoor Free Flight (Engine Powered)), the Flying Rules and the Judges Guide, of the British Model Flying Assn. be the Rules of this class under the FAI Sporting Code F4A. The FAI Sporting Code Technical Rules, (General), for Flying Scale Model Contests will also apply.
At present there is no standard for Free Flight Power Scale competition, and in some countries there are several sets of rules in use. The establishment of an FAI standard will achieve the following:

1. Recognition of the Class at National and International level.
2. Establishment of International Rules, enabling International competition to take place
3. Promotion and progress of this class of model.

VOLUME SM – SPACE MODELS

ANNEX 3 - SPACE MODEL RULES FOR WORLD CUP

a) Paragraph 9 Jury – Sweden. Replace the whole paragraph with:

<A Board of Judges of three responsible people shall be nominated by the CIAM Space Modelling Subcommittee to control that the Organisers have followed the Sporting Code rules and regulations>.

Reason: Clarification. The procedures of protests and appeals are clearly described in the Sporting Code General Section Chapters 5 and 9. In aeromodelling, we can't have rules in contradiction to the General Section. Application: January 2004.

9) *WORLD AND CONTINENTAL CHAMPIONSHIPS*

This is the up-to-date schedule for World and European Championships:

WORLD CHAMPIONSHIPS

YEAR	WORLD CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2004	F1A, F1B, F1J/F1P Juniors		FRANCE
	F1D (Seniors and Juniors)		ROMANIA
	F2A, F2B, F2C, F2D (Seniors and Juniors)		USA
	F3J (Seniors and Juniors)		CANADA
	F4B, F4C		POLAND
	F5B, F5D	Offers invited	
	SPACE MODELS (Seniors and Juniors)		POLAND

YEAR	WORLD CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2005	F1A, F1B, F1C	Ukraine Argentina	
	F1E (Seniors and Juniors)	Offers invited	
	F3A	France (tentative) Canada	
	F3B	Offers invited	
	F3C	Offers invited	
	F3D	France (firm)	
YEAR	WORLD CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2006	F1A, F1B, F1P Juniors	Offers invited	
	F1D (Seniors and Juniors)	Offers invited	
	F2A, F2B, F2C, F2D (Seniors and Juniors)	China Argentina	
	F3J (Seniors and Juniors)	Slovakia	
	F4B, F4C	Sweden (tentative)	
	F5B, F5D	Offers invited	
	SPACE MODELS (Seniors and Juniors)	Offers invited	

CONTINENTAL CHAMPIONSHIPS

YEAR	CONTINENTAL CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2004	F1A, F1B, F1C		ROMANIA
	F1E (Seniors and Juniors)	Offers invited	
	F3A		PORTUGAL
	F3B	Offers invited	
	F3C		GREECE
	F3D	Offers invited	
	F3A Asian-Oceanic	Australia (tentative)	

YEAR	CONTINENTAL CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2005	F1A, F1B, F1P Juniors	Romania	
	F1D (Seniors and Juniors)	Offers invited	
	F2A, F2B, F2C, F2D (Seniors and Juniors)	Czech Republic (firm)	
	F3J (Seniors and Juniors)	Slovenia Croatia	
	F4B, F4C	Portugal	
	F5B, F5D	Offers invited	
	SPACE MODELS (Seniors and Juniors)	Romania	

YEAR	CONTINENTAL CHAMPIONSHIPS	BIDS FROM	AWARDED TO
2006	F1A, F1B, F1C	Offers invited	
	F1E (Seniors and Juniors)	Offers invited	
	F3A	Offers invited	
	F3B	Offers invited	
	F3C	Offers invited	
	F3D	Offers invited	
	F3A Asian-Oceanic	Offers invited	

10) ANY OTHER BUSINESS

11) NEXT CIAM MEETINGS

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ANNEX TO THE AGENDA OF THE 2003 PLENARY MEETING

Annex 1	**2002 World Championship Reports**
Annex 2	**Subcommittees and CIAM Technical Secretary Reports**
Annex 3	**2002 World Cup Reports**
Annex 4	**Trophy Report**
Annex 5	**FAI-CIAM Medals and Diplomas: Nominations**
Annex 6	**New provisional class F3L, rules**
Annex 7	**New provisional class F3A/L, rules**
Annex 8	**New provisional class F4A, rules**
Annex 9	**Deferred Section: Scale, new flight and score sheets**

DEFERRED SECTION - DEFERRED SECTION - DEFERRED SECTION

This section contains all proposals regularly received by the FAI Office according to rules A.6 and A.7, but not eligible to be voted at the 2003 Plenary Meeting: rule A.12 applies. They are presented here for information and discussion.

VOLUME ABR – GENERAL RULES FOR CIAM ACTIVITIES

Section 4C – Model Aircraft - General Regulations and Rules for Contests and Records

Part Two - General rules for International Contests

a) 2.1. World Championship Events for Model Aicraft – Poland. Add this new paragraph:

8. Scale Junior Category

a) F4B – Control line model aircraft

Reason: To encourage and involve young competitors. Decrease in number of senior competitors in World and Continental Championships has been observed for a long time.

VOLUME F1 - SECTION 4C - MODEL AIRCRAFT – FREE FLIGHT

3.1 Class F1A - Gliders

a) 3.1.2 Characteristics of Gliders F1A – USA. Add the sentence:

<F1A models may use radio control only for irreversible actions to restrict the flight (dethermalization). Any malfunction or unintended operation of this function is entirely at the risk of the competitor>.

Reason: Remote Dethermalization (RDT) offers an important safety feature when a model is flying off the field, is about to hit an obstacle (a high voltage line, a tree or a busy road) or is in a very strong thermal. RDT cannot offer an advantage to clandestinely acquire a second attempt because second attempts are already banned if a model dethermalizes with 20 seconds of launch. Frequencies used for this radio function are short in duration and pulse coded. This option has been legally available to the F1C class for several years.

b) 3.1.7 Duration of Flights - USA

i) Eliminate the last sentence:

~~"For any flights with a maximum duration greater than three minutes the additional time over three minutes is used only to resolve any tie."~~

ii) Amend the first sentence as follows:

<The maximum duration to be taken for the official flights in world and continental championships is **three minutes thirty seconds** for the first round>.

c) 3.1.8 Classification – USA

i) Change 3.1.8.a to read:

<The total time for each competitor for each of the official flights defined in 3.1.3 is taken for the final classification. The total time achieved is also used to determine team classification>.

ii) Eliminate 3.1.8.b:

~~<In order to decide the individual placing when there is a tie, the total time achieved in each of the official flights defined in 3.1.3 will be taken without limitation at three minutes>."~~

iii) Change 3.1.8c to read:

<In order to decide the individual placings when there is a tie, additional flights shall be made after the last flight of the event has been completed. …>.

Reasons: The present "supermax" rules are causing unjust results at contests. Our sport is about accumulating flight time to decide the winner. Similar adjustments proposed for classes F1B and F1C: paragraphs 3.2.7, 3.2.8 (F1B) and paragraphs 3.3.7 and 3.3.8 (F1C)

3.2 Class F1B - Model Aircraft With Extensible Motors

a) 3.2.2 Characteristics of Model Aircraft with Extensible Motors F1B – USA. Add the following sentence:

<F1B models may use radio control only for irreversible actions to restrict the flight (dethermalization). Any malfunction or unintended operation of this function is entirely at the risk of the competitor>.

Reason: Remote Dethermalization (RDT) offers an important safety feature when a model is flying off the field, is about to hit an obstacle (a high voltage line, a tree or a busy road) or is in a very strong thermal. RDT cannot offer an advantage to clandestinely acquire a second attempt because second attempts are already banned if a model dethermalizes with 20 seconds of launch. Frequencies used for this radio function are short in duration and pulse coded. This option has been legally available to the F1C class for several years.

b) 3.2.7 Duration of Flights - USA

i) Amend the first sentence in paragraph 3.2.7:

<The maximum duration to be taken for the official flights in world and continental championships is **four** minutes for the first round>.

ii) Eliminate the last sentence of 3.2.7:

~~<For any flights with a maximum duration greater than three minutes the additional time over three minutes is used only to resolve any tie.>~~

Reason: The present "supermax" rules are causing unjust results at contests. Our sport is about accumulating flight time to decide the winner. Corresponds to changes proposed to 3.1.7 and 3.1.8

c) 3.2.8 Duration of Flights & Classification - USA

i) Amend 3.2.8.c as follows:

<The maximum flight time for the first of the deciding flights shall be **six** minutes>.

Reason: Having an unduly long first round max is discouraging to new flyers. Also, generally toward the end of the first round, thermal activity becomes apparent making a longer max easier thus penalizing those flyers that flew in the beginning part of the round. Starting the flyoff rounds at six minutes instead of the traditional five may allow the contest to be over 2 flyoff rounds.

ii) Amend paragraph 3.2.8.d) and add sentence:

<The organizer will establish a 10 minute period during which all the flyoff competitors must launch their model aircraft. …**The competitor may wind the motor at any time before or during all rounds that are flown during the contest>.**
Reason: Under the current rules it is not specifically stated that the competitor may wind his/her motor before the round starts during the 7 rounds that are normally flown before the flyoff (note: there seems to be a "gentle agreement" that winding does not start before the rounds). The current F1B rules do specify that the competitor must wind his/her own motor after the start of the **flyoff** rounds. This places unnecessary stress on the flyer, as a blown motor can take several minutes to remove and replace. This sport is about flying and not about the ability to wind in a flyoff. This rule dates back to when F1B motors were processed before the contest and the timer had to witness the installation of the motor in to the airplane.

3.3. CLASS F1C – MODEL AIRCRAFT WITH PISTON MOTORS

a) 3.3.7 Duration of Flights - USA

i) Amend the first sentence:

<The maximum duration to be taken for the official flights in world and continental championships is **four** minutes for the first round …>"

ii) Eliminate the last sentence:

~~<For any flights with a maximum duration greater than three minutes the additional time over three minutes is used only to resolve any tie>.~~

Reason: The present "supermax" rules are causing unjust results at contests. Our sport is about accumulating flight time to decide the winner. Corresponds to changes proposed to 3.1.7 and 3.1.8

b) 3.3.8 Duration of Flights & Classification – USA. Amend 3.3.8.c as follows:

<The maximum flight time for the first of the deciding flights shall be **six** minutes>.

Reason: Having an unduly long first round max is discouraging to new flyers. Also, generally toward the end of the first round, thermal activity becomes apparent making a longer max easier thus penalizing those flyers that flew in the beginning part of the round. Starting the flyoff rounds at six minutes instead of the traditional five may allow the contest to be over 2 flyoff rounds.

VOLUME F3A - RADIO CONTROL AEROBATICS

Part Five - Technical Regulations for Radio Controlled Contests

ANNEX 5 B - F3A R.C. AEROBATICS JUDGES' GUIDE

a) 5B.4 Criteria for Judging Manoeuvres - Czech Republic. Add the following sentence to item 5:

<Manoeuvres flown on lower speed and closer to the judges have to be evaluated higher>.

Reasons: 1. Flying on lower speed and closer to the judges is more difficult for pilots; 2. Judging of such manoeuvres is easier and all failures are clearly visible. 3. Models flying on lower speed are not so dangerous in the case of failure or interference.

VOLUME F3B J - SECTION 4C - MODEL AIRCRAFT F3B THERMAL SOARING - F3J THERMAL DURATION GLIDERS

Part Five – Technical Regulations for Radio Control Contests

5.3. CLASS F3B – THERMAL SOARING MODEL AIRCRAFT

a) 5.3.2.2. Launching

i) 5.3.2.2 a) – Germany. Change as follows:

Delete paragraph 5.3.2.2.a) 1: hand towing
Delete paragraph 5.3.2.2.a) 3: pulleys.

Reason: Hand towing is not more practised for F3B since many years. Up to 90° crosswind you can reach the same height than with hand towing in wind direction. If hand towing, especially with pulleys (only this makes sense), we must have the same safety rules concerning the pulleys and the ground anchor like in the class F3J.

ii) 5.3.2.2.b.a (2) – Luxembourg. Change as follows:

Amend as follows subparagraph d, g, h, i:

d) The plus and minus pole of the battery must be readily accessible ~~with alligator (crocodile) clips~~ for voltage measuring. **Therefore, every pole must have a drilled 4 mm hole.** One of the cables of the battery (through which the total current flows) must be accessible for the clamp transducer (clamp meter) ~~and the calibrated resistor.~~

g) One measurement will be taken. If the result of the first measurement is more than 22,55 milliohm and less than 30 milliohm then the winch is declared as being in accordance with the rules. If not, three more measurements will be made and the resistance of the complete circuit is the average of three consecutive measurements. The resistance is calculated with the formula Rtot = 1000 x Ub/I300 (Rtot in milliohm, Ub in Volt I300 in A).

h) ~~At the test, the voltage of the battery U300 must be greater or equal to 9V.~~

i) The organiser must appoint at least two processing officials, who will process at random the resistance of at least 20% of winches during the official contest time. **The processing of a chosen winch should be made immediately after the official flight.**

Reasons: d) The alligator clips are usually fixed on the battery clamps. This gives false values for the battery voltage under load. The calibrated resistor produces higher resistance values because of the two additional contacts. g) Every measurement is falsed by the tolerance of the instrument. The limit of 21,86 milliohm is in accordance with the maximal tolerances of the instruments. Giving a 0 score to a pilot for 21,86 m < Rtot < 23 m. under this conditions is not in the spirit of the competition. h) If the pilot flies with an empty battery, he penalises himself. i) Many pilots fly with team-winches. This clarifies, who will get a zero score. Annex: 1) Calculation of the lowest resistance

b) 5.3.2.4. Task B Distance – Germany. Change paragraph c) as follows:

c) **An audio system announces the pilot when his model crosses the base A and B Timing or announcing shall occur when the nose of the model…**

Reason: At all F3B-competions the crossing of base A and base B is announced with an audio system. Signalling by a judge or a flagman was used long time ago.

c) 5.3.2.5. Task C Speed – Germany. Change paragraph d) as follows:

d) **An audio system which is not more than 30 meters away from the position of the pilot (normally at base A at the safety line) announces to the pilot when the model aircraft crosses the base A or base B……**

…..Timing or announcing shall occur when the nose of the model ……

Reason: At all F3B-competitons crossing of base A and base B is announced by an audio system. A flagman would nowadays be deplaced. With the fixation of this maximum distance between the position of audio signal and the position of the competitor to 30 meters the runtime of the sound is about 0.1 sec. This runtime of the signal is nowadays with the high flight-speeds and the extremely short turns still acceptable.

5.6. CLASS F3J – THERMAL DURATION GLIDERS

a) 5.6.11. Final Classification – Germany. Change first part of paragraph 5.6.11.4. as follows **:**

<Final placing of the competitors who qualify for the fly-off shall be determined by scores in fly-off; their scores in the qualifying rounds being discarded. If less than **six (6)** fly off rounds are flown, their aggregate scores over the fly-off rounds is counted, if **six (6)** fly-off rounds are flown the worst result of each competitor is discarded>.

Reason: Discarding the worst result in the fly-off rounds shall be congruent to discarding the worst result in the qualifying rounds

VOLUME F4 - FLYING SCALE MODEL AIRCRAFT
F4B, CONTROL LINE SCALE - F4C, RADIO CONTROL SCALE

Part Six - Technical Rules for Flying Scale Model Aircraft Contests

6.1. General rules and standards for static judging of scale model aircraft

a) 6.1.3. Competition Programme – Scale Subcommittee/Spain

Add a new paragraph at the end of 6.1.3.:

<If the last part of the paragraph 6-1-4 apply then the F4C contest will commence with the static judging , and when the first 10 models has been passed the static judgement will commence the flight.

Reason: To get a more fluid contest.

b) 6.1.8. Helpers – Scale Subcommittee. Change the paragraph as follows:

<Each competitor is permitted one helper during the competition. In the case of multi-engined model aircraft one additional helper is permitted to assist in the starting of engines**. If more then the allowed number of helpers at any time assists the competitor, the flight is scored zero.** For radio control events no helper may touch the transmitter during an official flight except for assisting in starting of engine(s)>.

Reason: There must be clear ways in the rules for the officials at a contest to penalize a contestant who violates a rule. (The second sentence in this paragraph is the nearest example of that, so the proposed additional sentence is to harmonize the paragraph).

c) 6.1.9. Documentation (Proof of Scale).

i) Scale Subcommittee - Add at the end of paragraph 6.1.9.2.:

<The documentation submitted by the contestant must declare whether the model aircraft prototype is aerobatic or not. The judges will discuss this information during the static judging in F4B and before the first flight commences in F4C. The chief judge in each class makes the final decision before any flight is made in F4B and F4C>.

Reason: There are manoeuvres not to be flown by aerobatic aircrafts and therefore there must be time for considering this obvious limitation or benefit of the rules well in advance of the first flight. This is easily done in F4B where no flight is made until the static judging is finished but must be done otherwise in F4C as the flying and static judging is made in parallel.

ii) Argentina, Spain, Scale Subcommittee - Change paragraph 6.1.9.4.a as follows:

a) Scale Drawings:

<An accurate 3-view scale drawing of the full-size aeroplane, having a minimum span of 250 mm, and a maximum span of 500 mm. The drawings must be submitted in triplicate **and come from a reliable source as a published book, magazine or similar,** unpublished drawings by the competitor or other draftsman are not acceptable unless certified accurate in advance of the contest by an authoritative source such as the **respective National Scale Committee or equivalent owner**, the builder of original aircraft, or other competent authority>.

Reason: The number of competitors including on his documentation draws signed by the National Scale Committee is grooving and we afraid some people can make a wrong use of the rule and make first the plane, second the draw and at the end sing it without check the real prototype, we think it is not the way.

d) 6.1.10. Judging for Fidelity to Scale and Craftsmanship – Scale Subcommittee and Spain. Amend as follows:

<Items 1 to be judged at a minimum distance of 3m in F4B, and 5m in F4C, from the **nearest part C.G.** of the model. Judges must not touch the model>.

Reason: The new rules admit the planes are bigger and bigger then if the judges have to judge a 3 meter span plane, the half wing span is 1.5 meter more 5 meters of the rules make that the judges will be 6.5 meters far of the main part of the model whit this proposal the wing span is not so important and the judges will be in the same place whit independence of the plane wing span.

6.2. CLASS F4B – CONTROL LINE FLYING SCALE MODEL AIRCRAFT

a) 6.2.2. Control Mechanism – Scale Subcommittee. Add this sentence to the end of the paragraph:

<The safety strap must be attached to the wrist before any flight is called upon. Failure to use the safety strap will disqualify the whole flight, which is to be scored zero. The circle marshal is responsible for making the pilots aware of this safety issue>.

Reason: This is an issue which has been overlooked in the text in the present rules, which also lacks proper measures how to deal with the problem when a competitor does not to use the safety strap for one reason or another.

b) 6.2.6. Flight – Scale Subcommittee.

<The manoeuvres must be executed in the order listed below. Between the end of one manoeuvre and the start of the next one, the competitor must fly the aircraft a minimum of two laps. **Less then two laps between the end of one manoeuvre and the start of the next one will result in zero points of the second manoeuvre. More then three laps between any manoeuvre is allowed>.**

Reason: Considering the fact that in F4B there are just around 5 seconds per lap, which gives the judges very short time for reflection in their judging.

c) 6.2.6. Flight – Scale Subcommittee. Change as follows:

Introduce different coefficients to the Optional demonstrations, 6.2.6.3. - 6.2.6.6.

Delete the K-figures in paragraphs 6.2.6.3. – 6.2.6.6. (See new coefficients in paragraph 6.2.7.).
Taxi is compulsory after landing. Delete taxi as option O. as listed below.

6.2.6. Flight

The manoeuvres must be executed in the order listed below. Between the end of one manoeuvre and the start of the next one, the competitor must fly the aircraft a minimum of two laps. Less then two laps between the end of one manoeuvre and the start of the next one will result in zero points of the second manoeuvre. More then three laps between any manoeuvre is allowed

6.2.6.1.	**Take-off**	**K = 8**
6.2.6.2.	**Five laps of straight and level flight**	**K = 5**
6.2.6.3.	**Optional demonstration**	**K = See 6.2.7.**
6.2.6.4.	**Optional demonstration**	**K = See 6.2.7.**
6.2.6.5.	**Optional demonstration**	**K = See 6.2.7.**
6.2.6.6.	**Optional demonstration**	**K = See 6.2.7.**
6.2.6.7	**Landing**	**K = 9**
6.2.6.8.	**Taxi**	**K = 8**
6.2.6.9.	**a) Engine noise (realistic tone and tuning)**	**K = 3**
	b) Speed of the model a/c	**K = 4**
	c) Smoothness of flight	**K = 4**

Total sum of K must not exceed 65 (A lower sum of K is allowed when composing a flight programme).

Reason: In order to encourage the contestants at international competitions to show more flying oriented then mechanical "on/off-manoeuvres" there is a demand for different coefficients in the flight program at an F4B contest. A looping or another aerobatic manoeuvre should therefore, for example, have a much higher coefficient then the dropping of leaflets. It is not in the interest of the spectators at a scale competition to look at a model that is performing one mechanical manoeuvre after another, like opening of bomb-bay doors and then drop leaflets or a parachutist. A future F4B competition should therefore benefit from a greater variety of aircraft performing a wider selection of manoeuvres, then seen in the flight circle nowadays.
The Taxi procedure is a normal way to end a good landing, and will add good points to a landing with an intact u/c, which is also the intention of this amendment.

d) 6.2.7. Optional Demonstrations – Scale Subcommittee. Change as follows:

Add different coefficients to the 6.2.7. Optional demonstrations A. to P. as listed below:

6.2.7. Optional Demonstrations
Four optional demonstrations must be selected from the following list.

A. Multi-engine option - in order to qualify for full multi-engine points, all engines must run for the complete flight. Should any engine cut prematurely, then the marks will be reduced accordingly.

Note. The K factor of 8 applies to any multi-engine subject with three or more engines. No points are awarded for each individual engine.

B.	**Retract and extend landing gear**	**K**	**4**
C.	**Flaps**	**K**	**5**
D.	**Drop bombs or fuel tanks**	**K**	**4**
E.	**High flight over 30° line angle**	**K**	**8**
F.	**One inside loop**	**K**	**11**
G.	**Three inverted laps**	**K**	**12**
H.	**Wingover**	**K**	**8**
I.	**Figure eight**	**K**	**12**
J.	**Touch and go**	**K**	**8**
K.	**Lazy eight**	**K**	**11**
L.	**Parachute or leaflet drop**	**K**	**5**
M.	**Flight function of subject a/c**	**K**	**8**
N.	**Overshoot**	**K**	**8**

Reason: In order to encourage the contestants at international competitions to show more flying oriented then mechanical "on/off-manoeuvres" there is a demand for different coefficients in the flight program at an F4B contest. A looping or another aerobatic manoeuvre should therefore, for example, have a much higher coefficient then the dropping of leaflets. It is not in the interest of the spectators at a scale competition to look at a model that is performing one mechanical manoeuvre after another, like opening of bomb-bay doors and then drop leaflets or a parachutist. A future F4B competition should therefore benefit from a greater variety of aircraft performing a wider selection of manoeuvres, then seen in the flight circle nowadays.
The Taxi procedure is a normal way to end a good landing, and will add good points to a landing with an intact u/c, which is also the intention of this amendment.

e) 6.2.7. Optional Demonstrations – Scale Subcommittee. Amend as follows:

6.2.7. Optional Demonstrations

<The competitor must be prepared to give evidence to the judges during the static judging that the flying options selected for the flights are typical and within the normal capabilities of the aircraft subject modelled. The F4B chief judge will make the decision before the flight commences.

Only one attempt is permitted for each manoeuvre, the only exception is the take-off as described in 6.2.5.b.

The selected options may be flown in any order but the order must be marked on the score sheet and any manoeuvre flown out of order will be marked zero.

Not more then one drop-option may be selected.

Any model that flies with wheels down whereas the prototype actually featured retractable u/c shall have the total flight score reduced by 25 %.

In order to qualify for the definition multi-engine, the prototype model must have three (3) or more engines>.

Reasons: As proposed earlier concerning the alteration of 6.1.9.2. The decision of the subject aircraft's capabilities as aerobatic or not, and what optional manoeuvres the contestant will be allowed to perform with the scale model, is already taken at the static judging in the F4B class. The drop options, which are more or less so called ON-OFF manoeuvres, tend to impoverish the flight programmes at the contests today and should be reduced in order to enhance the interest in control line scale flying.

Just two engines in a scale model are not enough in these days to deserve multi-engine points. Modern engines, with pump and very small on board glow systems are much more reliable than during the days this rule was written. Even the word "multi" itself implies more than just two items. See also 6.1.9. Documentation and changes in Annex 6B, Judge's guide.

6.3 CLASS F4C – RADIO CONTROLLED FLYING SCALE MODEL AIRCRAFT

a) 6.3.1. General Characteristics – South Africa.

i) Change as follows:

6.3.1 General Characteristics

Maximum surface area:.....250dm2

Maximum **mass** of the complete model without fuel in flying condition including any dummy pilot:.....12 kg (+1%)

Reason: It is a generally accepted fact that a 1% tolerance can be expected in certain measuring apparatuses, like a weighing device. Allowing a 1% tolerance (120 grams, on a maximum weight of 12kg) will alleviate the necessity for the organisers to supply a calibration certificate, or to supply a test-weight. It is also a physical fact that the **mass** of a specific object is constant any where on earth (or on the moon for that matter) while **weight** varies significantly depending on latitude and height above sea level (As an example the acceleration of a free falling body "g" is 978 cm/s2 at the equator and 983 cm/s2 at the poles due to the difference in weight of a body at different points on earth.) The weighing apparatuses in general use, determine weight and not mass. With the high weight limit of 12 kg (soon to become 15 kg) this difference is becoming significant for competitors as was illustrated in Canada when some competitors of leading nations in the class had problems to get their models within the weight limit, despite having made sure at home that they were indeed below the limit. On-site calibration of the organisers' scale is not always a possibility. Desperate shedding of weight at the competition could lead to safety problems or loss of reliability due to removal of onboard glow, or using smaller capacity batteries, or rearward Centre of Gravity shifts.

ii) Change as follows:

6.3.1 General Characteristics

Maximum surface area:.....250dm2
Maximum **mass** of the complete model without fuel in flying condition including any dummy pilot:.....12 kg

The Sub Committee Chairman will keep and maintain an accurate 5 kg calibration mass for use during any World Championships or international event so that organisers' scales can be calibrated on site and scale calibration certificates will not be required.

Reason: It is a physical fact that the **mass** of a specific object is constant any where on earth (or on the moon for that matter) while **weight** varies significantly depending on latitude and height above sea level (As an example the acceleration of a free falling body "g" is 978 cm/s2 at the equator and 983 cm/s2 at the poles due to the difference in weight of a body at different points on earth.) The weighing apparatuses in general use, determine weight and not mass. With the high weight limit of 12 kg (soon to become 15 kg) this difference is becoming significant for competitors as was illustrated in Canada when some competitors of leading nations in the class had problems to get their models within the weight limit, despite having made sure at home that they were indeed below the limit. On site calibration of the organisers scale with an accepted standard would alleviate the lingering doubt as to the accuracy of the organisers scale. Desperate shedding of weight at the contest could lead to safety problems or loss of reliability due to removal of onboard glow or using smaller capacity batteries or rearward Centre of Gravity shifts.

iii) Change as follows in paragraph 6.3.1.c. - USA

Raise the 42volt limit to 75 volts.

Reason: There are no laws or arguments which support the 42v limit for RC scale models. Europe has reportedly adopted the IEC limit of 75VDC. The maximum DC voltage at which the hand can let go of the conductor is 104VDC. ("Practical Electrical Safety"' Marcel Dekker). There are many every day household exposures to the dangers of far higher voltages which are quite legal in all countries. The 42volt limit unduly restricts 15kg single-engine scale models.

iv) Change as follows in paragraph 6.3.1.c. - USA

Specify that battery voltage limit is based on cell "rated" voltage; e.g. 1.2 volts for NiCad and NiMH cells.

Reason: F4C rules do not specify how battery voltage is determined, making the rule subject to interpretation. Fully charged re-chargeable batteries soon revert to rated voltage.

v) Change as follows in paragraph 6.3.1.c. - USA

Specify that a model may have only one battery per motor and that batteries may not be interconnected to exceed the 75volt limit.

Reason: Present wording states "motors" (plural) and "power source" (singular) which may be interpreted to restrict multi-motor models to a single battery. While multi-motor models may have several batteries (one per motor), it should be specified that these batteries may not be interconnected by any means if the result exceeds the 75 volt limit.

vi) Change as follows in paragraph 6.3.1.c. - USA

<Electric powered models may have no more than one battery per motor. Each battery shall be rated at no more than 75 volts (e.g. 1.2 volts per NiCad or NiMH cell). Batteries may not be inter-connected by any means to exceed the 75 volt limit>.

Reason: The Low Voltage Directive 73/23/EEC is one a series of measures introduced under article 100a of the Treaty of Rome. Article 100a directives all have the primary objective of creating a single European market in goods and services with the objective of providing producers and consumers with the benefits of economies of scale that this offers. The directive was originally enacted in 1973 but was modified in 1993 by directive 93/68/EEC to include a requirement for CE marking and the creation of a technical file.
The effect of the directive has been to introduce identical requirements for the safety of electrical products in every country within the European Economic Area (EEA).

b) 6.3.7. Optional Demonstrations – Sweden. Add a new manoeuvre:

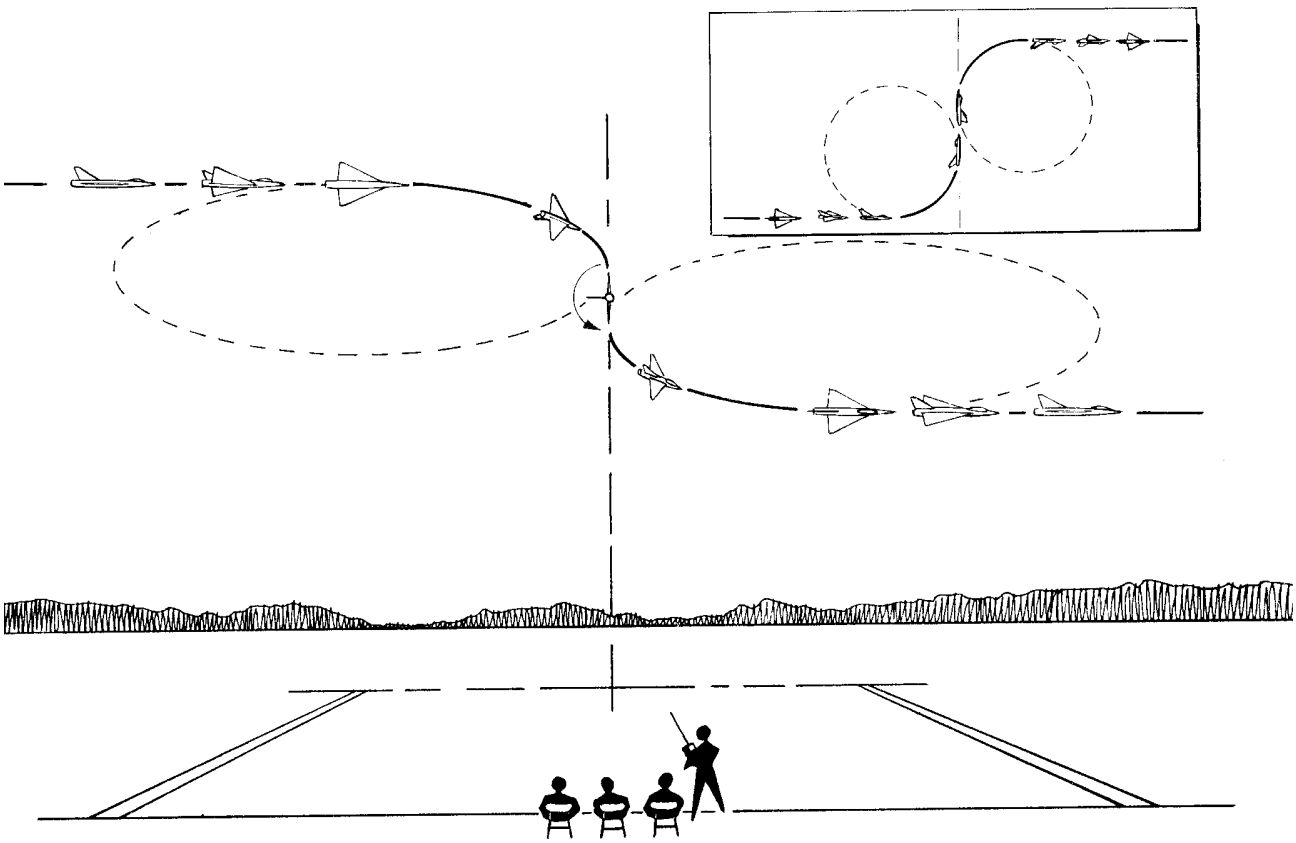
Y. John Derry Turn
<The model approaches at a high speed in a straight and level flight on a line parallel with the judge's line. The model then makes a steep (approx. 90° bank) one quarter circle turn in a direction away from the judges, without loosing height, and centred in front of the judges, followed by a half roll in the same rolling direction as the entry, again directly followed by a steep one quarter circle turn in the opposite direction, and then flies off straight and level in parallel to the entry of the manoeuvre>.

Reasons: The late British Squadron Leader John Derry invented this elegant evasive manoeuvre, which he demonstrated at numerous air shows before his fatal crash at Farnborough in 1952. The historic background of this manoeuvre is the same as that of the Immelman Turn, which is already flown in F4C. The manoeuvre should attract the rising interest in jet and highly aerobatic aircraft that is seen today. The manoeuvre should also be relatively easy to judge correctly as it is well centred and in good view of the judges at all times. It is also spectacular to look at as it is to be flown at a fairly low height and at a good speed.

Diagram and Judges' Guide

Y. John Derry Turn

The model approaches at a high speed in a straight and level flight on a line parallel with the judge's line. The model then makes a steep (approx. 90° bank) one quarter circle turn in a direction away from the judges, without loosing height, and centred in front of the judges, followed by a half roll in the same rolling direction as the entry, again directly followed by a steep one quarter circle turn in the opposite direction, and then flies off straight and level in parallel to the entry of the manoeuvre.



Errors

1. Entry not in parallel with the judges line
2. The manoeuvre not centred in front of the judges
3. The rolling manoeuvre in front of the judges not straight
4. The roll in centre not in the same direction as the entry
5. Exit not in parallel with entry
6. Significant height difference during the manoeuvre
7. The manoeuvre misshapen as seen as part of a figure eight
8. The manoeuvre is executed too low or too high in order to be easily judged

ANNEX 6B - CLASS F4B - JUDGES' GUIDE, C/L SCALE FLYING SCHEDULE

a) 6.B.1. General – Scale Subcommittee

Change the ninth sentence in the 6.B.1 to read:
<Before the flying part of the contest commences, normally done in conjunction with the static judging, there must be agreement between the chief judge and the respective team manager on the exact nature of the manoeuvre "M" if such a manoeuvre is chosen by any contestant. There must be no such discussion at the flight circle>.

Reason: To follow the proposed change in 6.1.9.2., Documentation (Proof of scale) and 6.2.7. Optional demonstrations. To put at least some precision in the dropping options and to justify different scoring by the judges. The word approx. in the overshoot manoeuvre is too vague in order to make proper judging by the judges.
The judging of Realism of Flight concerning anything but smoothness of flight is considered too woolly or not stringent enough, especially in the F4B class why the coefficients should be lowered.

b) 6.b.2.7. Optional Demonstrations / General – Scale Subcommittee

Delete the second sentence "~~The competitor must also…~~

c) 6.b.2.7. Optional Demonstrations / General – Scale Subcommittee. Make the following changes:

D: Dropping of Bombs or Fuel Tanks and L parachute drop.

Add this text:
<The dropping zone shall be positioned in front of the judges as a circle with the radius of five meters and shall be clearly marked on the ground with paint or tape>.

d) 6.b.2.7. Optional Demonstrations / General – Scale Subcommittee. Make the following changes:

M: Flight Function of the subject a/c. Change the first sentence to:

< The competitor may demonstrate one flight function of his own choice in each flying round>.

Note. Not more then one drop option may be nominated.

e) 6.b.2.7. Optional Demonstrations / General – Scale Subcommittee. Make the following changes:

O: Delete the manoeuvre as an option (taxi is proposed to be mandatory after landing)

f) 6.b.2.7. Optional Demonstrations / General – Scale Subcommittee. Make the following changes:

P: Overshoot. Change approx. one metre height to "not more then one metre and at least 15 metre length.

Reasons: To follow the proposed change in 6.1.9.2., Documentation (Proof of scale) and 6.2.7. Optional demonstrations. To put at least some precision in the dropping options and to justify different scoring by the judges. The word approx. in the overshoot manoeuvre is too vague in order to make proper judging by the judges.

The judging of Realism of Flight concerning anything but smoothness of flight is considered too woolly or not stringent enough, especially in the F4B class why the coefficients should be lowered.

ANNEX 6D – CLASS F4C – NEW FLIGHT AND STATIC SCORE SHEETS

a) Annex 6D – Scale Subcommittee and Argentina

Add a new Annex 6D with flight and static score sheets.

Reason: Unify the score sheets (static and flight) in the international contests. The file is at **ANNEX 9 to this Agenda.**

VOLUME F5 – R.C. ELECTRIC POWERED MODEL AIRCRAFT

Part Five – Technical regulations for Radio Controlled Contests

5.5.4 CLASS F5B – ELECTRIC POWERED MOTOR GLIDERS

a) 5.5.4.1. Definition – Germany.

Change paragraph 5.5.4.1.b. Model Aircraft Specifications as follows:

Maximum number of cells: 30

Allowed can size and max. amount of cells: 30 x 2/3 sub C; 24 x 4/5 sub C; 18 x 1/1 sub C (+pole height not included)

Reason: Due to the very rapid development of rechargeable batteries of special types and sizes and the fact that some of these cells very often are not accessible to most of the electric flyers throughout the world it maybe best that for F5B there be some approved list of battery types/sizes so as to make the selection of batteries easier.
For the future it is suggest that this list be updated every 2 years just after the end of the WC by the sub committee F5. This way the fliers have stable battery rules for 2 years. The reduced participation in F5B contests in Germany, Austria and other Nation may also be related to the battery problem.
Looking over the fence the growing amount of pilots in F3B events started with the introduction of the regulated winch concept.

5.5.5. CLASS F5C – ELECTRIC POWERED HELICOPTERS

a) 5.5.5.13 Manoeuvre Schedules – Switzerland. Replace the whole paragraph:

<The flight program for each round consists of a maximum of eight (8) manoeuvres out of the 22 proposed in the following lists. The pilot must select three manoeuvres from list 1 (hovering manoeuvres) and three manoeuvres from list 2 (aerobatic manoeuvres). One more manoeuvre may be selected from list 1 or list 2. Another manoeuvre has to be selected from list 3 (compulsory landing manoeuvre). This compulsory landing manoeuvre has to be flown as the last manoeuvre.
Each manoeuvre is assigned a K-factor to be used as multiplication factor for the scores between 0 and 10 given by the judges (see 5.5.5.9. Scoring). The total sum of K-factors (including the compulsory manoeuvre) shall not exceed the value of 27 (twenty-seven). For regional championships this value can be lowered by the organizer in order to limit the difficulty level>.

b) 5.5.5.14 Performance of the Schedules – Switzerland. Include new sub-paragraph c) and renumbered:

The order announced at the beginning of the flight is determined by the pilot respecting the following rules:

a) All hovering manoeuvres must be in one sequence.
b) All aerobatic manoeuvres must be in another sequence.
c) The compulsory landing manoeuvre must be the last manoeuvre.
d) The order of the first two sequences is determined by the pilot.
e) Once the order of the manoeuvres is announced to the judges and the flight has started, it may not be changed.
f) The pilot may select different manoeuvres for every round.

Reasons: a) The recent progress in battery technology allows performing 8 manoeuvres without problems. More manoeuvres are in the interest of the pilots, as 6 manouevres allows only short flights. This will guarantee a more interesting and fair competition; **b)** All airplanes and helicopters end their flights with a landing. Making the landing or the emergency landing (autorotation) to a compulsory element of the schedule will provide a well defined end to the program. There will be no more models flying around and landing somewhere after the end of the manoeuvres; **c)** The lower K-factor will still leave the priority to the manoeuvres selected by the pilot from list 1 and 2; **d)** The limitation of the flown K-factors forces the pilots to choose not only high ranked manoeuvres. Chances are good that a broader variety of manoeuvres are flown by the competitors.

VOLUME SM – SPACE MODELS

Part Two – Space Models Specifications

a) 2.4. Construction Requirements – Slovakia. Add the following sentence to paragraph 2.4.3.:

<In case of class S1, the smallest body diameter must not be less than 18 mm for at least of 75% of the overall length>.

Reason: There are speculative constructions where the second stage is as thin as pencil, which increases the risk of free fall of that model and endanger participants of the competition.

b) 2.4.4. Minimum dimensions – Slovakia

Change minimum dimensions of subclass A:

<Class A: minimum diameter mm 40; minimum overall length 500 mm>.

Reason: The last change increased the impulse of the engine for 100% and the change of measures was very small. Currently we are having great results. The competitors have to go very far for their models and they have cross streets, highways, rivers and railways. It is very dangerous. It is necessary to keep bigger measures and lower the impulse of the engine.

Part Four – General Rules for International Contests

a) 4.1. World Championship events for Space Models – Slovakia. Change as follows:

1. W.Ch. for Senior classes:
a) altitude models S1B;
b) parachute duration models S3A;
c) boost glider duration models S4A;
d) scale altitude models S5C;
e) streamer duration models S6A;
f) scale S7;
g) rocket glider duration and precision landing models S8E/P;
h) gyrocopter duration models S9A.

Reason: As for paragraph 2.4.4. The last change increased the impulse of the engine for 100 % and the change of measures was very small. Currently we are having great results. The competitors have to go very far for thier models and they have to cross streets, rivers and railways. It is very dangerous. It is necessary to keep bigger measures and lower the impulse of the engine. The proposal of suggested changes is supposed to help to unify the rules for juniors and seniors and especially to improve safety. The difference between juniors and seniors is causing discrimination in the World Cup.

b) 4.7. Radio Controlled Space Models – Slovakia. Add a new sub-paragraph 4.7.4.

<The competitor has to have at least one set of crystals>.

Reason: Clarification. If the competitors have only one set of crystals, there can be a problem with dividing into groups.

Part Eleven – Rocket Glider Duration Competition (Class S8)

a) 11.7.5. Organisation of Starts. Amend as follows:

i) 11.7.5.2. – Slovakia.Add the following sentence at the end of paragraph 11.7.5.2.

<to collect transmitters>

Reason: For safety reason, it is the last chance of common control of interruption. Picking up the transmitters during the working time doesn't give that chance anymore.

ii) 11.7.5.3 – Slovakia.Delete the following words in the first sentence:

~~<to collect transmitters>.~~

Reason: For safety reason, it is the last chance of common control of interruption. Picking up the transmitters during the working time doesn't give that chance anymore.